

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 7463-12 9757 07/24/2003 James A. Zollo 10/626,058 **EXAMINER** 12/23/2004 30448 7590 **AKERMAN SENTERFITT** ARBES, CARL J P.O. BOX 3188 ART UNIT PAPER NUMBER WEST PALM BEACH, FL 33402-3188 3729

DATE MAILED: 12/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
	10/626,058	ZOLLO ET AL.
Office Action Summary	Examiner	Art Unit
	C. J. Arbes	3729
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply		
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).		
Status		
1) Responsive to communication(s) filed on 24 July 2003.		
,	action is non-final.	
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.		
Disposition of Claims		
 4) Claim(s) 1-28 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s) 1.5.6.13-24 and 26-28 is/are rejected. 7) Claim(s) 2-4.7-12 and 25 is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement. 		
Application Papers		
9) The specification is objected to by the Examiner.		
10)⊠ The drawing(s) filed on <u>24 July 2003</u> is/are: a)⊠ accepted or b)⊡ objected to by the Examiner.		
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).		
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.		
Priority under 35 U.S.C. § 119		
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 		
Attachment(s)		
1) Notice of References Cited (PTO-892)	4) Interview Summary	
Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	Paper No(s)/Mail Da	

Application/Control Number: 10/626,058

Art Unit: 3729

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 5, 6, 13-24 and 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japan Pat No. 2002-223076, by Koju; hereinafter '076.

The '076 teaches applying a first conductive layer i.e. 6 and 7) onto a first carrier, applying a first dielectric or insulating layers (i.e. 4 and 5) onto the first conductive layer wherein the substrate includes a via, placing an embedded component e.g. a capacitor, wherein the component is placed in a vertical position (Cf. e.g. Fig. 1) in a via, applying a second conductive layer (i.e. 16), and placing a second dielectric or insulation layer (i.e. 18) on the second conductive layer. It would have been obvious, if indeed the '076 does not expressly teach the following; to wit, to provide a first and a second adhesive layer on the first and second dielectric in order to insure a cohesive and strong bonding of the dielectric laminates. As applied to claim 5 the adhesives recited in this claim are all well know in this art and therefore it is held to have been obvious to use any one of theses adhesives for the step of applying the first adhesive layer. As applied to claim 14 Fig 1 of the '076 shows an interconnection between a conductive surface of the embedded component and one of the first and second conductive layers.

Application/Control Number: 10/626,058 Page 3

Art Unit: 3729

Claims 2-4, 7-12 and 25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to C. J. Arbes whose telephone number is 571-272-4563. The examiner can normally be reached on M, T, R, F from 8 to 6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, P. Vo.. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

C. J. Arbes
Primary Examiner
Art Unit 3729